



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,872	03/21/2006	Per Broberg	06275-502US1	3651
26164	7590	12/05/2008	EXAMINER	
FISH & RICHARDSON P.C.			KOSSON, ROSANNE	
P.O BOX 1022				
MINNEAPOLIS, MN 55440-1022				
			ART UNIT	PAPER NUMBER
			1652	
			NOTIFICATION DATE	DELIVERY MODE
			12/05/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No. 10/572,872	Applicant(s) BROBERG ET AL.	
	Examiner Rosanne Kosson	Art Unit 1652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 7-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/21/06, 5/23/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicants' election without traverse of Group 7, claims 1-4 and 6, in the reply filed on November 13, 2008 is acknowledged. Claims 7-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to non-elected inventions, there being no allowable generic or linking claim. No claims have been amended, canceled or added. Upon reconsideration of the claims and the prior art, the restriction requirement in the Office action of October 16, 2008 is withdrawn, and claim 5 will be rejoined with claims 1-4 and 6. Accordingly, claims 1-6 are examined on the merits herewith.

Claim Objections

Claims 1-6 are objected to because of the following informality. Claim 1 recites the abbreviation MMP12. For the sake of clarity and comprehension, the names of molecules and compounds in independent claims should be written out in full, although the abbreviations may appear subsequently in parentheses. Abbreviations may be used in dependent claims. Appropriate correction is required. MMP12 should be amended to read "matrix metalloproteinase 12 (MMP12)."

Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. As discussed in the previous Office action, the set of peptide

Art Unit: 1652

fragments in Table 1 is a different set of fragments than those in Table 2. Thus, claim 5 cannot depend from claim 1, which recites Table 2. But, claim 1 may be amended, or claim 5 may be written in independent form.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Mecham et al.

("Elastin degradation by matrix metalloproteinases," J Biol Chem 272(29):18071-18076, 1997.

Claim 1 encompasses a composition comprising at least one naturally occurring fragment of elastin that is produced by matrix metalloproteinase 12 (MMP12) proteolysis. This fragment is one of the molecular ions in the peptide fingerprint, and it has the same molecular mass as the naturally occurring fragment. The peptides in Tables 1 and 2 are defined only by their molecular mass.

Mecham et al. disclose a composition comprising at least one naturally occurring fragment of elastin that is produced by MMP12 proteolysis (see p. 18072, Materials and Methods; p. 18074; and p. 18075, Fig. 4). HME (human macrophage metalloelastase) is an earlier name for MMP12. Therefore, a holding of anticipation is required.

Art Unit: 1652

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kucich et al. (WO 91/18290 A1), as evidenced by Mecham et al. ("Elastin degradation by matrix metalloproteinases," J Biol Chem 272(29):18071-18076, 1997.

As noted above, claim 1 encompasses a composition comprising at least one naturally occurring fragment of elastin that is produced by matrix metalloproteinase 12 (MMP12) proteolysis. This fragment is one of the molecular ions in the peptide fingerprint, and it has the same molecular mass as the naturally occurring fragment. The peptides in Tables 1 and 2 are defined only by their molecular mass.

Kucich et al. disclose a composition, human urine, comprising at least one naturally occurring fragment of elastin (see p. 4, last paragraph; p. 7; and Fig. 1). Fig. 1 is a chromatogram from a molecular sieve column showing a number of peaks that correspond to elastin fragments, although the number of peaks and separate fragments cannot be determined. As discussed above, Mecham et al. disclose that elastin fragments are produced by MMP12 proteolysis (see p. 18071, right col.; and p. 18072, left col.). Therefore, a holding of anticipation is required.

Conclusion

Claims 2-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1652

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosanne Kosson whose telephone number is (571)272-2923. The examiner can normally be reached on Monday-Friday, 8:30-6:00, alternate Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nashaat Nashed can be reached on 571-272-0934. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rosanne Kosson
Examiner, Art Unit 1652

rk/2008-11-26

/JON P WEBER/

Supervisory Patent Examiner, Art Unit 1657